



SED – Risk Assessment and Safety Advisory (RASA)



Phase II Workshop

R.15-01-008/D.17-06-015

SB 1371 (Leno). Natural Gas: Leakage Abatement

November 16, 2018



Agenda

- **10:00-10:15** **Welcome, Emergency Procedures, Agenda Review**
- **10:15-10:30** **Milestones**
- **10:30-11:00** **Cost-Effectiveness Data CARB, EDF.**
- **11:00-11:30** **BP Harmonization CARB.**
- **11:30-12:00** **GO-112F incorporation**
- **12:00-1:00** **Lunch Break**
- **1:00-2:00** **LUAF Ratemaking. SoCal, PGE, SWG.**
- **2:00-3:00** **BP-20b, Leak Mapping. SED, SoCal, PGE, EDF.**
- **3:00-3:45** **Compliance Plan Template Changes. SED.**
- **3:45-4:00** **Wrap Up, Next Steps**



Safety and Emergency Information

- In the event of an emergency, please proceed calmly out the exits.
- The Evacuation Location is the courtyard between the War Memorial Building and Opera House, across the street from City Hall.
- Walk down Van Ness, pass the War Memorial, and enter the courtyard.



Practical Information

WiFi Access:

SSID: cpucguest

User: guest

Password: cpuc103118

Restrooms:

**out the Auditorium doors
and down the far end of the
hallway.**

Call in information:

- Phone line: 1-877-820-7831
Participant code: 996 020 1687

WebEx:

- Meeting Number: 712 984 891
- Password: 107721



Milestones

- Phase 1 Decision June 2017
- Compliance Plans March 2018
- Evaluation Letters August 2018
- Resolution Adopted October 2018
- 4th Joint Leak Report Pending
- Comments ruling Expected Q1 2019
- Proposed Decision Expected Q3 2019



Cost-Effectiveness

- What data is necessary in order for the Commission to consider a “cost-effectiveness” framework for in this proceeding? This should include data that will be useful if the Commission continues to employ a qualitative cost-effectiveness evaluation of Best Practices.



BP Harmonization/GO-112F

- How should the Commission's Annual Report Requirements and 26 Best Practices be harmonized with information or action required by other entities such as PHMSA, DOGGR, CARB and local air quality management districts?
- How should rules and procedures, including best practices, be incorporated into GO-112F?



LUAF

- How should ratemaking for Lost and Unaccounted for Gas (LUAF) be structured?



BP 20b Leak Mapping

- “Utilities shall work together, with CPUC and ARB Staff, to come to agreement on a similar methodology to improve geographic evolution and tracking of leaks to assist demonstration of actual emission reductions...Geographic leak maps shall be publicly available with leaks displayed by zip code or census tract.”



How do we meet the goals?

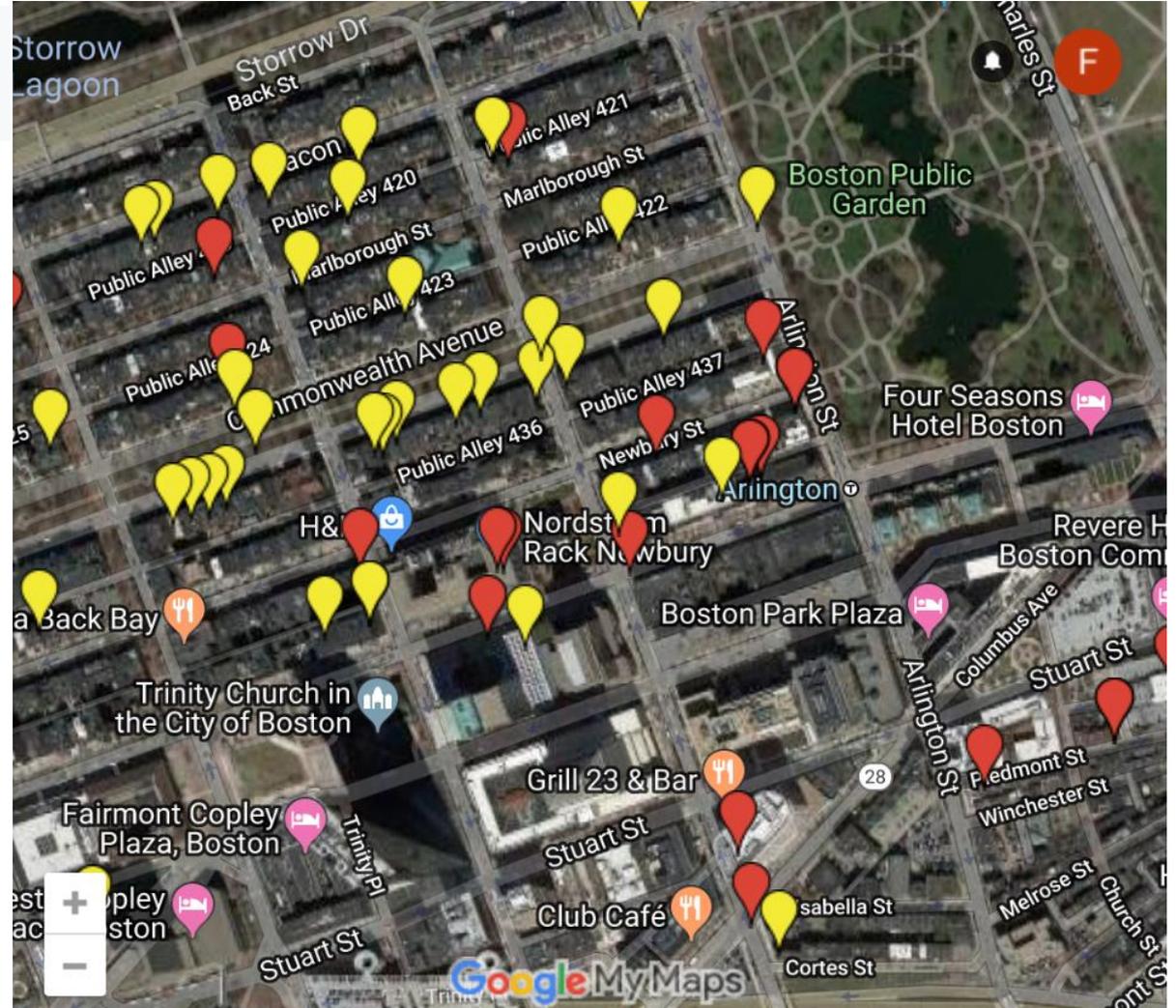
- Leaks by ZIP Code
- Assist demonstration of reductions



Boston, Massachusetts

The yellow map-pins are unrepaired gas leaks in 2017. Red map-pins show repaired gas leaks in 2017. Faded-yellow

- Unrepaired Leaks 2014
- Repaired Leaks 2014
- Repaired Leaks 2015
- Unrepaired Leaks 2015
- Leaks missing from 2015 data
- Boston REPAIRED Leaks 2017
 - ▼ All items
- Boston UNREPAIRED Leaks 2017
 - ▼ All items



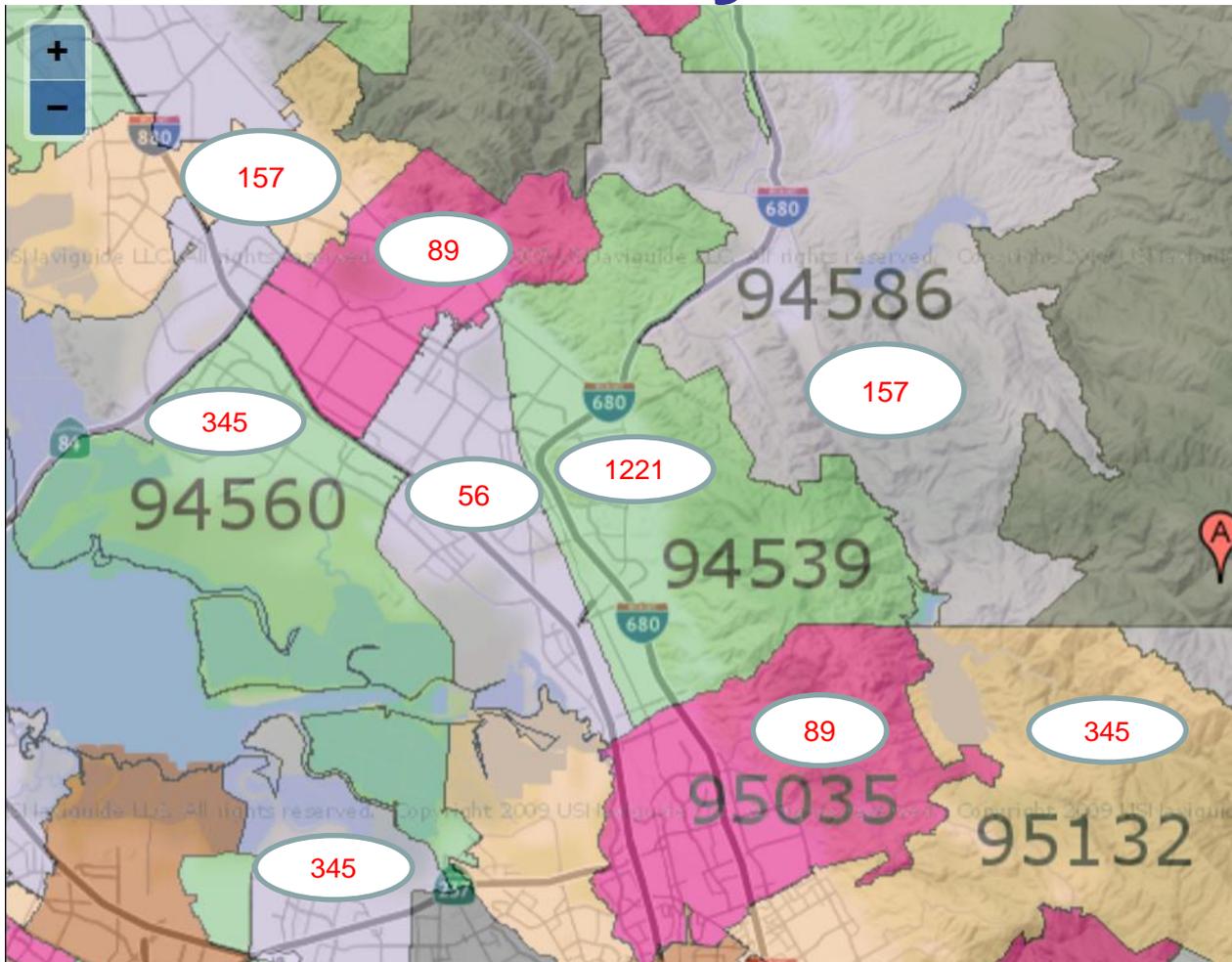


(Switch to Boston website view on laptop)

Illustrate how filters are used on the boston map, etc.



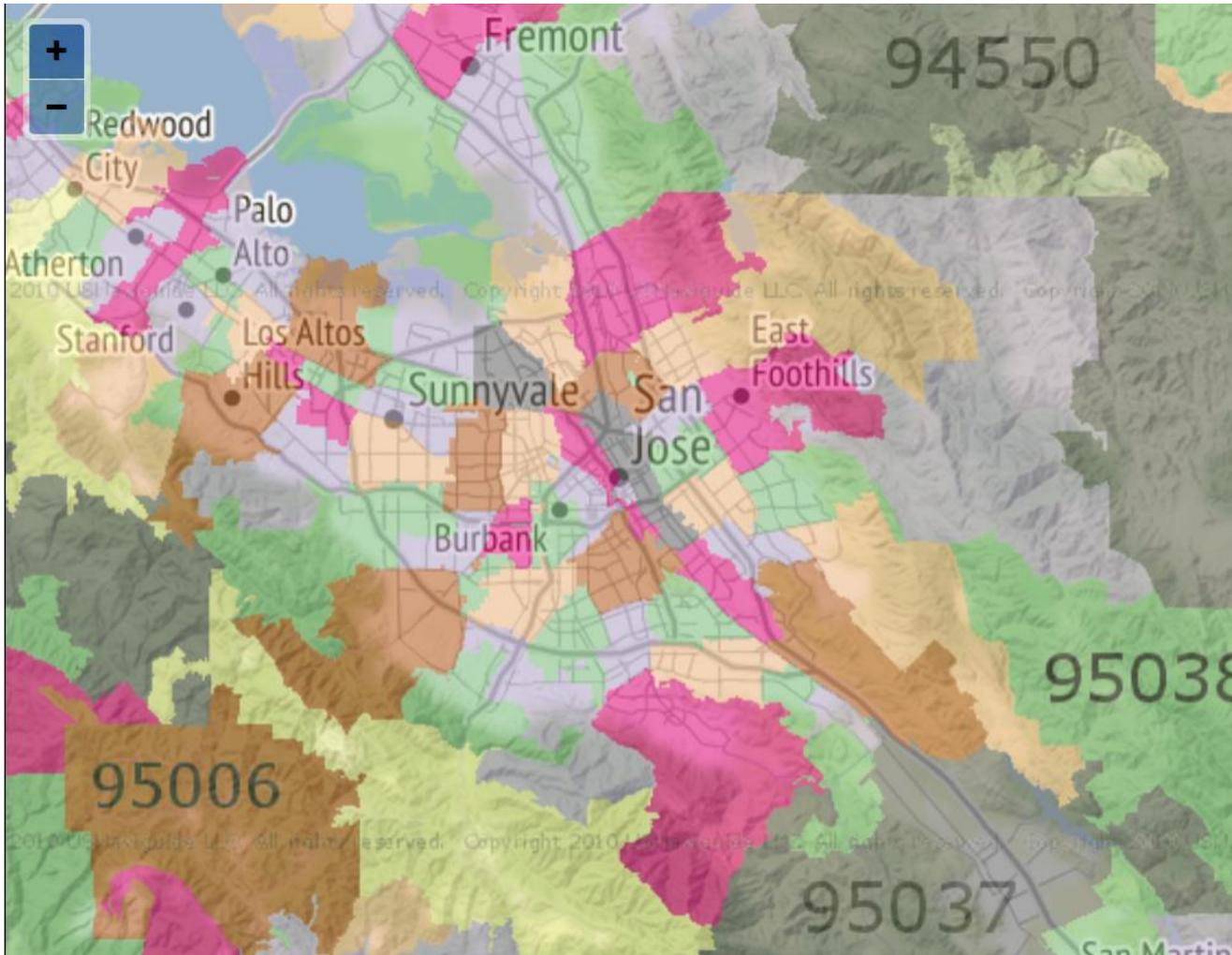
Leaks by ZIP Code



- Leak Number?
- Leak Volume?
- Time period?
- Comparison?



Zoom Out on ZIP Codes?



- Too many zones
- Zones too small for data bubbles



RASA Leak Map Proposal

- Display Volume in MCF by Zip Code
 - Also show aggregate volume for State.
- Data periods:
 - Last quarter, last year, previous year, baseline
- Map Zoom should filter data to viewable content



Template/Report Changes

- What changes, if any, should be made to the Compliance Plan Template, Annual Report Template, Annual Report Framework and Accompanying Spreadsheet Template, and Pilot Project and R&D Requirements? (if time).



Compliance Plan (CP) Template Change Topics

- Template Revision by Q3 2019
 - Plan Introduction/Summary
 - Redundant Material
 - Supporting Material
 - Pilot/R&D Projects
 - Reduction Calculations



CP Introduction Section

- Summarize Plan Results and Forecasts
- Table of MCF Reductions
 - MCF for each of next 2 years, and 2030
 - Cost/MCF of reduction programs
 - “Compounding”
 - is part of Cost/MCF calculation
- List BP Exemptions



CP Redundant Material

- Give once and refer to it subsequently
- Put common material in Chapter 1
 - Historic work in common
 - Same responses for similar BPs
 - Other repeated text



CP Supplemental Material

- Operating Procedures
 - Refer to document and provide on website
 - Or, provide in Appendix
 - Don't insert within a BP Section
- Write out only the changed paragraphs
 - Show old vs. new in the BP section



CP Pilot/R&D Projects

- Use Project Template and Dashboard
 - Developed by RASA with PG&E, SEMPRA
 - Considered party comments and PU 740.1
- Project Template Revision
 - Will depend on experience with Reviews



Project Dashboard (sample)

Ref	Title	Consortium	Milestone 1			Milestone 2			Milestone 3			Milestone 4			Comments
			Current Blowdown Methods Evaluation	Comp. Plan	Revised	Alternative Methods Evaluation	Comp. Plan	Revised	Final Report	Comp. Plan	Revised	Comp. Plan	Revised	Comp. Plan	
BP 5-1	Method to Prevent Blowdown of Gas to Atmosphere (5.16.n)	OTD												Work is completed. Requested Maureen for information about the Final Report.	
			Q2 2017	N/A	100%	Q2 2018	N/A	100%	Q3 2018	Q4 2018	50%				
BP 5-2	Methane Oxidation Catalysts for Reduction of Emissions in Flaring (M2017-004)	NYSEARCH	First round of optimization of catalyst activity and device design			Second Round of Optimization of catalyst activity			Device optimized and tested in the laboratory					Presentation by Matteo Carnello (Stanford) at NYSEARCH meeting on September 19: promising results on catalyst optimization.	
			Comp. Plan	Revised		Comp. Plan	Revised		Comp. Plan	Revised					
			Q3 2018	Q4 2018	90%	Q1 2019	N/A	0%	Q3 2019	N/A	0%				
BP 16-1															
BP 17-1	Evaluation of Point & Shoot Methane Detectors (7.18.f)	OTD	Project Initiation			Final Report									New project to evaluate and compare "point and shoot" laser methane detectors now available on the market.
			Comp. Plan	New		Comp. Plan	New								
			N/A	Q3 2018	100%	N/A	Q4 2019								

- BP 17-2
- BP 17-3
- BP 17-4
- BP 18-1
- BP 18-2
- BP 19-1
- BP 19-2
- BP 19-3
- BP 20a-1
- BP 20a-2
- BP 20a-3
- BP 21-1
- BP 22-1
- BP 22-2
- BP 23-1

LEGEND

	Not Started yet
	Active on time
	Active Late
	Cancelled or Terminated



CP Reduction Calculations

- Show formulas and methods in BP Section
- Check across BPs for double counting



Wrap Up



Thank You

**For Additional Information:
Fred Hanes, (415) 703-5264**

<http://cpuc.ca.gov/General.aspx?id=8829>

